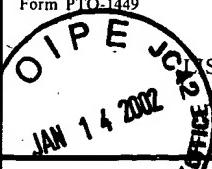
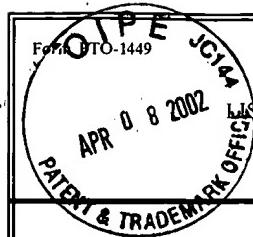


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				APPLICANT Segal et al.					
				FILING DATE December 16, 1999		GROUP 1742			
U.S. PATENT DOCUMENTS									
*Examiner Initial		Document Number	Date	Name		Class	Subclass	Filing Date If Appropriate	
HW	AA	5,850,755	12/98	Segal					
NW	AB	5,456,815	10/95	Fukuyo et al.					
NW	AC	5,826,456	10/98	Kawazoe et al.					
NW	AD	5,413,650	05/95	Jarrett et al.					
	AE								
	AF								
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	AK								
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FOREIGN PATENT DOCUMENTS									
		Document Number	Date	Country		Class	Subclass	Translation	
HW	AM	882 813	12/98	EPO				Yes	No
	AN								
	AO								
	AP								
	AQ								
OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)									
HW	AR	Mukai, T. et al, "Dynamic Mechanical Properties of a Near-Nano Aluminum Alloy Processed by Equal-Channel-Angular-Extrusion", Nano-Structured Materials, Vol. 10, No. 5, pp. 755-765 (1998) Elsevier Science Ltd.							
HW	AS	Hatch, J.E., <u>ALUMINUM</u> , 1984, Chap. 5, "Metallurgy of Heat Treatment and General Principles of Precipitation Hardening", pp. 134-157, 175-183.							
HW	AT	Ferrasse, S. et al., "Development of a Submicrometer-Grained Microstructure in Aluminum 6061 Using Equal Channel Angular Extrusion", J. Mater. Res. Vol. 12, No. 5, May 1997, pp. 1253-1261.							
EXAMINER	<i>Barry D. Wilkin, III</i>			DATE CONSIDERED		2/26/02			
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09/465,492APPLICANT
Vladimir Segal et al.FILING DATE
December 16, 1999GROUP
1742

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HW	AA	6,193,821	02/01	Zhang			
HW	AB	6,348,113 B1	02/02	Michaluk et al.			
HW	AC	6,085,966	07/00	Shimomuki et al.			
HW	AD	6,024,852	02/00	Tamura et al.			
HW	AE	5,798,005	08/98	Murata et al.			
HW	AF	5,231,306	07/93	Meikle et al.			
HW	AG						
HW	AH						
HW	AI						
HW	AJ						
	AK						
	AL						

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		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
HW	AM	08146201	07.06.1996	Japan				
HW	AN	10008244	13.01.1998	Japan				
HW	AO	WO 99/27150	03.06.1999	PCT				
HW	AP	WO 99/02743	21.01.1999	PCT				
HW	AQ	WO 01/29279 A1	26.04.2001	PCT				

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)

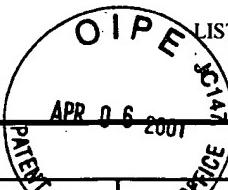
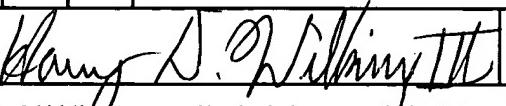
HW	AR	Ferrasse, S. et al., "Microstructure and Properties of Copper and Aluminum Alloy 3003 Heavily Worked by Equal Channel Angular Extrusion", Metallurgical and Materials Transactions A, vol. 28A, April 1997, pp. 1047-1057.
HW	AS	Pavate et al., "Correlation between Aluminum alloy sputtering target metallurgical characteristics, Arc initiation, and In-film defect density", SPIE Vol. 3214, 1997, pp. 42-47.
	AT	

EXAMINER *Henry S. Wilkins*

DATE CONSIDERED

12/18/02

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 LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)					APPLICANT Vladimir Segal et al.			
					FILING DATE December 16, 1999		GROUP 1742	
U.S. PATENT DOCUMENTS								
*Examiner Initials	TRADEMARK OFFICE	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate	
	AA							
	AB							
	AC							
	AD							
	AE						RECEIVED APR 11 2001	
	AF						TC 1700	
	AG							
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	AL							
FOREIGN PATENT DOCUMENTS								
		Document Number	Date	Country	Class	Subclass	Translation	
HW	AM	WO 00/31310	06/00	PCT			Yes	No
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	AO							
	AP							
	AQ							
OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)								
	AR							
	AS							
	AT							
EXAMINER				DATE CONSIDERED	7/19/01			
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		LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)			APPLICANT Vladimir Segal et al.			
					FILING DATE December 16, 1999		GROUP 1742	
U.S. PATENT DOCUMENTS								
*Examiner Initial	Document Number	Date	Name		Class	Subclass	Filing Date If Appropriate	
HW	SN 09/098,760 (as filed and amended)		Shah et al				6/17/00	
	AB							
	AC							
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	AG						TC 1700	
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OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)								
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EXAMINER <i>Harry S. Wilkinson Jr.</i>		DATE CONSIDERED <i>7/19/01</i>						
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		LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)		APPLICANT Vladimir Segal et al.		FILING DATE December 16, 1999		GROUP 1742
U.S. PATENT DOCUMENTS								
*Examiner Initial		Document Number	Date	Name		Class	Subclass	Filing Date If Appropriate
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<i>HW</i>	AM	WO 99/66100	12/1999	PCT			Yes	No
<i>HW</i>	AN	WO 87/07650	12/1987	PCT				
	AO							
	AP							
	AQ							
OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)								
	AR			<i>RECEIVED JUL 17 2001 TC 1700</i>				
	AS							
	AT							
EXAMINER <i>Danny S. Wilkins, III</i> DATE CONSIDERED <i>7/19/01</i>								
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Form PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE			ATTY. DOCKET NO. 30-5004(4015)		SERIAL NO. 09/465,492
		LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)			APPLICANT Vladimir Segal et al.		
					FILING DATE December 16, 1999	GROUP 1742	
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*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
HW	AA	3,653,981	04-1972	Watanabe et al.			
HW	AB	3,849,212	11-1974	Thornburg			
HW	AC	5,766,380	06-1998	Lo et al.			
HW	AD	6,123,896	09-2000	Meeks, III et al.			
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HW	AM	03-082773	04-1991	Japan			
HW	AN	08-134606	05-1996	Japan			
	AO						
	AP						
	AQ						
OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)							
HW	AR		Material Evaluation Report, Ingot No. T891C, 03/25/98, 1 page.				
HW	AS		Canonico, "Stress-Relief Heat Treating of Steel", ASM Handbook Vol 4: Heat Treating ASM International, 1991, pages 33-34.				
	AT						
EXAMINER	<i>Randy D. Willitt</i>			DATE CONSIDERED	12/18/02		
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